

**Abstract**

A system and method for industrial control I/O forcing is provided. The invention includes a processor, shared memory and an I/O processor with cache memory. The invention provides for the cache memory to be loaded with I/O force data from the shared memory. The I/O processor performs I/O forcing utilizing the I/O force data stored in the cache memory. The invention further provides for the processor to notify the I/O processor in the event that I/O force data is altered during control program execution. The invention further provides for the I/O processor to refresh the cache memory (*e.g.*, *via* a blocked write) after receipt of alteration of the I/O force data from the processor.

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